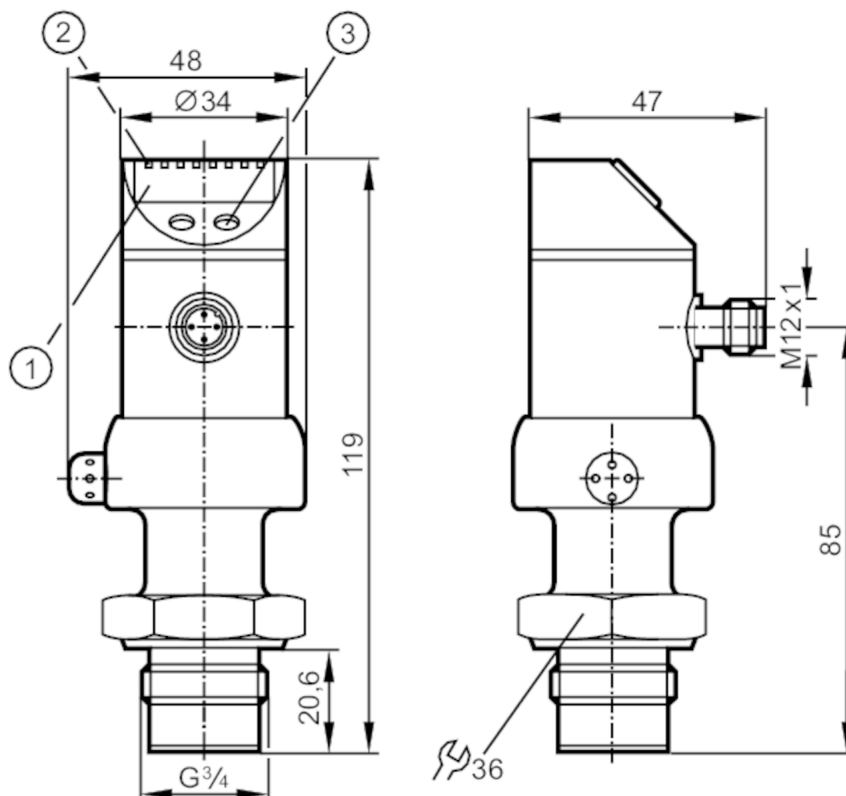




Flush pressure sensor with display

PI-004-REB34-MFRKG/US/ IP



- 1 alphanumeric display 4-digit
- 2 LEDs Display unit / switching status
- 3 programming button



Application			
Application	hygienic systems		
Installation	freely rotatable housing 350°		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Pressure rating	30 bar	435 psi	3000 kPa
Min. bursting pressure	100 bar	1450 psi	10000 kPa
Type of pressure	relative pressure		
No dead space	yes		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 50		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Power-on delay time [s]	0.5		
Integrated watchdog	yes		
Inputs / outputs			
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1		



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Outputs			
Total number of outputs	2		
Output signal	switching signal; analogue signal; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	1		
Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	250		
Switching frequency DC [Hz]	6		
Number of analogue outputs	1		
Analogue current output [mA]	4...20, invertible; (scalable 1:4)		
Max. load [Ω]	(Ub - 10 V) / 20 mA		
Analogue voltage output [V]	0...10, invertible; (scalable 1:4)		
Min. load resistance [Ω]	2000		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	-1...4 bar	-14.5...58 psi	-100...400 kPa
Set point SP	-0.99...4 bar	-14.35...58 psi	-99...400 kPa
Reset point rP	-1...3.99 bar	-14.5...57.85 psi	-100...399 kPa
Analogue start point	-1...3 bar	-14.5...43.5 psi	-100...300 kPa
Analogue end point	0...4 bar	0...58 psi	0...400 kPa
In steps of	0.005 bar	0.05 psi	0.5 kPa
Factory setting		SP1 = 1.000 bar	rP1 = 0.920 bar
		ASP = 0.000 bar	AEP = 4.000 bar
Accuracy / deviations			
Switch point accuracy [% of the span]	< ± 0,2; (Turn down 1:1)		
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)		
Characteristics deviation [% of the span]	< ± 0,2; (Turn down 1:1 linearity, incl. hysteresis and repeatability limit value setting to DIN 16086)		
Linearity deviation [% of the span]	< ± 0,15; (Turn down 1:1)		
Hysteresis deviation [% of the span]	< ± 0,15; (Turn down 1:1)		
Long-term stability [% of the span]	< ± 0,1; (Turn down 1:1; per year)		
Temperature coefficient zero point [% of the span / 10 K]	< ± 0,05; (0...70 °C)		
Temperature coefficient span [% of the span / 10 K]	< ± 0,15; (0...70 °C)		



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Response times		
Response time	[ms]	< 100
Damping for the switching output dAP	[s]	0.1...100
Damping for the analogue output dAA	[s]	0.1...100
Step response time analogue output	[ms]	25
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span	
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection	IP 67; IP 69K	
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-5 Surge	0,5/1 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	163
Mechanical data		
Weight	[g]	381
Materials	stainless steel (1.4404 / 316L); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)	ceramics (99.9 % Al2O3); PTFE; stainless steel (1.4435 / 316L); surface characteristics: Ra < 0,4 / Rz 4	
Min. pressure cycles	100 million	
Process connection	threaded connection G 3/4 external thread	
Displays / operating elements		
Display	Display unit	4 x LED, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; psi; kPa; % of the span	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; Contacts: gold-plated		

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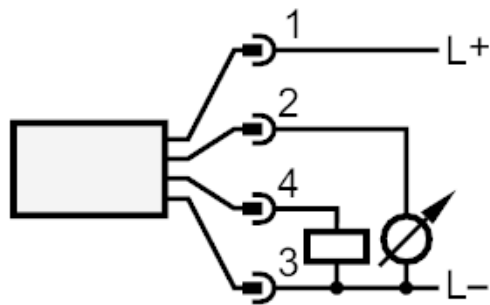


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Connection



OUT1 switching output
OUT2 analogue output